

AMENDMENTS TO THE DRAWINGS

The attached sheet(s) of drawings includes changes to Fig. 1.

REMARKS

This paper is presented in response to the non-final official action of February 4, 2008, wherein (a) claims 1-12 and 16-22 were pending, (b) the drawings were objected to, (c) claims 1 and 11 (and, by extension, claims 2-10, 12, and 16-22) were rejected for obviousness-type double patenting in view of claims 28 and 1, respectively, of Schanz US 6,810,138 ("Schanz"), (d) claims 1-3, 6, 7, 11, 12, 16, and 17 were rejected as anticipated by Shigeyama, et al. US 5,450,204 ("Shigeyama"), (e) claim 8, 9, 18, and 19 were rejected as obvious over Shigeyama in view of Kvamme, et al. US 6,636,301 ("Kvamme"), and (f) claims 4, 5, 10, and 20-22 were rejected as obvious over Shigeyama in view of Gerber, et al. US 5,608,453 ("Gerber").

This response is timely filed, as it is accompanied by a petition for automatic extension of time to file in the third month, and the requisite petition fee.

By the foregoing, a replacement sheet of drawings is submitted, claims 1 and 11 have been amended to incorporate the limitations of claims 2 and 12, respectively, claims 2 and 12 have been cancelled, claim 6 has been amended for clarity, and the dependency of claim 21 has been amended in view of the cancellation of claim 2.

Reconsideration of the application, as amended, is solicited.

The issues raised in the action will be addressed in the order appearing in the action.

Drawings

In the replacement sheet of drawings submitted herewith, the unlabeled rectangular boxes have been provided with descriptive text labels, as required by the examiner. In view thereof, reconsideration and withdrawal of the objection to the drawings is submitted to be in order, and is solicited.

Double Patenting and Information Disclosure

A terminal disclaimer with respect to Schanz US 6,810,138 is submitted herewith in response to the double patenting rejection of claims 1 and 11 (and, by virtue of dependency, claims 2-10, 12, and 16-22). As indicated by the examiner, the double patenting rejection is overcome by filing of the terminal disclaimer, and an indication to that effect is solicited.

Schanz US 6,810,138 is not available as a reference under 35 USC 102 as it is the inventor's own work and was not published more than one year prior to the U.S. filing date of the present application.

However, the examiner's attention is directed to Schanz's counterpart WO 99/02021, which was published January 14, 1999, more than one year prior to the present application's international filing date of July 7, 2004. A copy of WO 99/02021 is submitted herewith for the examiner's convenience.

Claim Rejections – 35 USC 102 and 103

Each of the anticipation and obviousness rejections relies upon Shigeyama as the sole reference (the anticipation rejection of claims 1-3, 6, 7, 11, 12, 16, and 17) or a primary reference in combination with a secondary reference (claims 4, 5, 8-10, and 18-22). Shigeyama's disclosure differs significantly from the claims, as amended.

It is well known that computer-aided drafting (CAD) or equivalent software and a host computer will be used when developing the layout of a printed circuit, etc. Due to practical needs, however, the CAD data from the host computer must be edited ("prepared"), if a screen mask (or template) is to be produced, which screen mask is used for producing real (i.e., actual) products. Further, and as set forth in the present application, the products produced by such a screen mask must be inspected or examined.

According to Shigeyama and the present application, the real or actual product is optically detected such that the detection result is in the form of digital

data and the inspection is made by comparing such digital data ("actual digital data") with reference or inspection (digital) data ("desired digital data.")

However, the respective ways in which the desired digital data are obtained according to Shigeyama and the invention differ significantly.

According to Shigeyama, the CAD data of the host computer are converted to obtain the inspection data. The CAD data corresponds to design data used to design the screen mask, but is not used to actually produce the screen mask.

According to the present invention (using the wording of Shigeyama herein) the "prepared data" (used for producing the screen mask – see Shigeyama at column 2, lines 41-50 and claims 4, 8 and 13) are directly used as the inspection data. Solely for the purpose of explaining Shigeyama, the prepared data best corresponds to control data used to produce the screen mask. Those of ordinary skill in the art generally understand that control data generally refers to the data used in the process of producing (manufacturing) the screen mask, as contrasted with data used to design the screen mask (i.e., CAD data).

While Shigeyama uses CAD data (design data) to obtain the inspection data (desired digital data), Shigeyama does not use the prepared data (control data) to obtain the inspection data. By contrast, the present invention uses prepared data (control data) to obtain the inspection data (format a desired data set from the control data employed for producing the template).

This procedure of the invention avoids parallel processing of the CAD data of the host computer, whereas, under the procedure of Shigeyama, the CAD data are not only converted to obtain the inspection data, the CAD data are also processed (prepared) to produce a screen mask. Furthermore, while those of ordinary skill in the art generally regard the CAD data of the host computer as the optimal data, the inventor in the present application has found that using the prepared data (control data) both for producing the screen mask and for producing the inspection data for the inspection of the product produced by use of the screen mask takes into account any deviations introduced through the production of the real screen mask. These

deviations would not be present in the data used to design the screen mask, such as the CAD data of Shigeyama.

Further, the respective ways in which tolerances are accounted for according to Shigeyama and the invention differ significantly. While Shigeyama discloses judging whether or not the results of the comparison are within an allowable range (see Shigeyama column 6, line 65 to column 7, line 3), consideration of tolerances in Shigeyama is not really helpful, because the real screen mask may differ from the optimal design data (i.e., the CAD data of the host computer) in various respects. In contrast, in the present invention, it is the production tolerances of the products produced by use of the real screen masks over the ideal screen masks which are taken into account. The consideration of tolerances is more helpful in the present invention, because the control data are used to obtain the desired pattern (as represented by the desired data set).

Accordingly, Shigeyama does not disclose each of the features as recited and arranged in claims 1-12 and 16-22, and therefore the applicant requests withdrawal of the anticipation rejection of claims 1-3, 6, 7, 11, 12, 16, and 17.

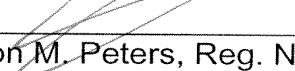
Likewise, the applicant requests withdrawal of the obviousness rejections of claims 4, 5, 8-10, and 18-22, in which Shigeyama is cited in combination with either Kvamme or Gerber. However, no combination of Shigeyama, Kvamme or Gerber discloses the invention as claimed. Just as Shigeyama does not disclose obtaining the desired digital data from control data, Kvamme and Gerber also do not disclose this feature, nor have Kvamme and Gerber been cited for this purpose. As such, Kvamme and Gerber fail to make up for the deficiency of Shigeyama.

For all the foregoing reasons, it is submitted that the claims are neither anticipated nor obvious in view of the applied references, and reconsideration and withdrawal of all rejections and allowance of the application are solicited.

Should the examiner wish to discuss the foregoing or any matter of form in an effort to advance this application toward allowance, he is urged to telephone the undersigned at the indicated number.

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Respectfully submitted,

By 
Aaron M. Peters, Reg. No. 48,801
MARSHALL, GERSTEIN & BORUN LLP
6300 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6357
(312) 474-6300
Attorney for Applicant